GOVERNMENT OF INDIA
WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION
LOK SABHA

STARRED QUESTION NO:118
ANSWERED ON:03.03.2016
Erosion by Rivers
Kushawaha Shri Ravindra;Ray Shri Bishnu Pada

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION be pleased to state:

(a) the details of the loss suffered due to floods and soil/bank erosion by rivers in the country including Andaman and Nicobar Islands during each of the last three years, State/UT-wise;
(b) whether the Government has provided any financial or other assistance for the purpose and if so, the details thereof along with success achieved in the matter, State/UT-wise; and
(c) the future plan of the Government to check soil/bank erosion, conserve/utilise rain water and control recurring floods in the country?

Answer

THE MINISTER OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION

(SUSHRI UMA BHARTI)
(a) to (c) A statement is laid on the Table of the House.

Statement Referred to in Reply of para (a) to (c) of Lok Sabha Starred Question No. 118 for answer on 03.03.2016 regarding "Erosion by Rivers"

(a) The State/UT-wise details of losses suffered due to floods including soil/bank erosion by rivers in the country including Andaman and Nicobar Islands during the years 2013, 2014 and 2015 as informed by respective State/ UT Governments are given in Annexure-1 to 3 respectively.
(b) Yes, Madam. The Government of India has provided central assistance to the State Governments under the State-Sector Scheme, Flood Management Programme (FMP) for undertaking works related to flood control, river management, anti-erosion, removal of drainage congestion and anti-sea erosion during XI and XII plans. The State-wise details of works approved, funds released till date and area protected are given in Annexure-4 and 5 respectively.
(c) As regards soil / bank erosion and controlling recurring floods, the related schemes are formulated and implemented by the State Governments as per their priorities, since the subject of flood management falls within the purview of States. However, Government of India supplements their efforts by rendering technical advice and promotional financial assistance to enable the State Governments to undertake flood management and anti-erosion works in critical areas. The Ministry has initiated the study of siltation and erosion in major rivers in order to enable States to undertake combination of structural measures viz. embankments and channel improvement through dredging and non-structural measures viz. flood forecasting and flood plain zoning for effective mitigation of flood damages. The Government of India has already provided additional financial resources to the States through devolution of central taxes for undertaking required flood control measures.
For conservation of rain water, the Ministry has prepared plans for promoting (i) Rain Water harvesting &artificial recharge of ground water, (ii) Inter-linking/Intra-linking of rivers for transfer of excess water from surplus river basins to deficit basins and (iii) Repair Renovation & Restoration (RRR) of water bodies.

*****

Annexure -1
Annexure referred to in Reply of Part (a) of Lok Sabha Starred Question No. 118 for answer on 03.03.2016-regarding "Erosion by Rivers".
STATE-WISE FLOOD DAMAGES DURING 2013

Sl.No.	Name of State	Area affected	Population affected	Damage to Crops	Damage to Houses	Cattle lost	Human lives lost	Damage to public utilities	Total damages crops,house& public utilities
		m.ha	million	Area in m.ha	Value Rs.Cr.	Nos.	Value Rs.Cr.	nos.	nos. Rs.Crore in Rs.Crore
1	2	3	4	5	6	7	8	9	10 11 12
1	ANDHRA PRADESH	1.630	3.020	1.630	44.905	75304	2.244	2743	88 66.957 114.285
2	ARUNACHAL PRADESH	0.310	0.310	0.310	8.245	986	12.851	75	52 854.424 875.519
3	ASSAM	0.001	0.006	0.001	0.000	0	0.000	0	0 0.000 0.000
4	BIHAR	0.600	6.900	0.600	105.720	156518	24.020	6548	218 16.610 146.350
5	CHATTISGARH	0.000	NR	0.000	NR	0	NR	0	NR 0.000 NR
6	GOA	NR	0	0	0	4	0.008	0	0 0 0.008
7	GUJARAT	NR	0.177	0.000	7.750	407	0.144	274	186 0.000 7.894
8	HARYANA	NR	NR	NR	NR	NR	NR	NR	NR NR NR

9 HIMACHAL PRADESH 0.102 0.000 0.102 506.000 11243 200.000 24267 73 2228.370 2934.370
10 JAMMU & KASHMIR NR NR NR NR NR NR NR NR NR NR
11 JHARKHAND 0.022 0.199 0.022 3.894 528 0.202 1 3 0.000 4.096
12 KARNATAKA 0.228 0.000 0.228 1703.070 12310 9.997 368 124 0.000 1713.067
13 KERALA 0.011 2.839 0.011 138.800 26694 36.830 80059 198 499.900 675.530
14 MADHYA PRAADESH NR NR NR NR NR NR NR NR NR NR
15 MAHARASHTRA NR NR NR NR NR NR NR NR NR NR
16 MANIPUR 0.000 0.000 0.000 0.000 0 0.000 0 0 0.000 0.000
17 MEGHALAYA NR NR NR NR NR NR NR NR NR NR
18 MIZORAM NR NR NR NR NR NR NR NR NR NR
19 NAGALAND NR 0.075 0.000 1.720 982 29.890 2680 0 1.800 33.410
20 ODISHA 0.046 0.390 0.046 0.000 5857 0.216 34 24 0.000 0.216
21 PUNJAB 0.110 0.0087 0.110 136.460 36206 25.040 954 44 195.420 356.920
22 RAJASTHAN 0.040 0.229 0.040 22.300 13108 3.859 157 14 60.860 87.020
23 SIKKIM NR 0.200 NR NR 34 NR 106 16 NR 156.200
24 TAMILNADU NR NR NR NR 1314 NR 258 92 NR NR
25 TRIPURA 0.002 0.021 0.002 2.163 3338 1.854 0 4 0.198 4.215
26 UTTAR PRADESH 0.349 3.544 0.349 0.000 79600 0.000 550 380 0.000 3259.530
27 UTTARAKHAND NR 0 0 0 4726 0 9470 580 0 0
28 WEST BENGAL 0.182 3.112 0.182 533.950 233336 178.970 28311 41 13.580 726.500
29 A & N ISLAND NR NR NR NR NR NR NR NR NR NR
30 CHANDIGARH Nil Nil Nil Nil Nil Nil Nil Nil Nil Nil
31 D & N HAVELI Nil Nil Nil Nil Nil Nil Nil Nil Nil Nil
32 DAMAN & DIU 0.000 0.000 0.000 0.000 0 0.000 0 0 0.000 0.000
33 DELHI 0.007 0.008 0.002 0.010 nil nil nil nil nil 0.010
34 LAKSHADWEEP NR NR NR NR NR NR NR NR NR NR
35 PUDUCHCHERRY NR NR NR NR NR NR NR NR NR NR
TOTAL 3.640 21.147 3.636 3214.987 662495 526.125 156855 2137 3938.119 11095.139

Annexure-2

Annexure referred to in Reply of Part (a) of LokSabha Starred Question No. 118 for answer on 03.03.2016-regarding "Erosion by Rivers".

STATE-WISE FLOOD DAMAGES DURING 2014

Sl. No. Name of State Area affected in Population affected in Damage to Crops Damage to Houses Cattle lost Human lives lost Damage to public utilities Total damages crops,house, & public utilities

Mha Million Area in mha Value in RsCrore Nos. Value in RsCrore Nos. Nos. in Rs.Crore in Rs.Crore

1 2 3 4 5 6 7 8 9 10 11 12
1 ANDHRA PRADESH NR NR NR NR 3279 317.040 NR NR NR 317.040
2 ARUNACHAL PRADESH 0.000 0.833 0.023 97.380 2742 3.525 1992 56 2335.408 2436.313
3 ASSAM 0.002 0.003 0.002 NR NR NR NR NR 79.780 NR
4 BIHAR 3.900 0.312 0.500 176.400 13662 10.780 34 158 5.400 192.580
5 CHATTISGARH NR NR NR NR NR NR NR NR NR NR
6 GOA NR NR NR NR 41 NR NR NR NR NR
7 GUJARAT 0.000 0.000 0.000 0.000 0 0.000 0 0 0.000 0.000
8 HARYANA NR NR NR NR NR NR NR NR NR NR
9 HIMACHAL PRADESH 1.780 0.481 0.014 189.150 1963 3.710 698 45 638.970 831.830
10 JAMMU & KASHMIR NR 0.275 NR NR NR NR NR 298 NR NR
11 JHARKHAND NR NR NR NR NR NR NR NR NR NR
12 KARNATAKA 0.005 NR 0.005 NR 895 NR 85 27 728.800 728.800
13 KERALA 0.019 0.032 0.019 215.563 7197 10.000 NR 122 108.000 333.563
14 MADHYA PRADESH NR NR NR NR NR NR NR NR NR NR
15 MAHARASHTRA Nil Nil Nil Nil Nil Nil Nil Nil Nil Nil
16 MANIPUR NR NR NR NR NR NR NR NR NR NR
17 MEGHALAYA 0.016 0.341 0.016 70.700 10701 71.203 8822 66 77.417 219.320
18 MIZORAM NR NR NR NR NR NR NR NR NR NR
19 NAGALAND 0.004 NR 0.004 NR 847 NR 2860 NR NR NR
20 ODISHA 3.970 4.019 3.970 NR 49104 NR 187 61 NR NR
21 PUNJAB 0.039 0.400 0.039 44.930 36429 21.590 954 44 66.600 133.120
22 RAJASTHAN NR NR NR NR NR NR NR NR NR NR
23 SIKKIM NR NR NR NR NR NR NR NR NR NR
24 TAMILNADU NR NR NR NR NR NR NR NR NR NR
25 TRIPURA 0.001 0.004 0.000 1.449 2045 2.971 20 0 0.544 4.530
26 UTTAR PRADESH 0.450 1.398 0.450 NR 3652 NR 73 106 NR NR
27 UTTARAKHAND 0.001 NR 0.001 NR 1447 NR 348 66 NR NR
28 WEST BENGAL 0.051 0.448 0.038 0.000 25477 0.000 132 134 19.137 19.137
29 A & N ISLAND NR NR NR NR NR NR NR NR NR NR
30 CHANDIGARH NR NR NR NR NR NR NR NR NR NR

31 D & N HAVELI NR NR NR NR NR NR NR NR NR NR
32 DAMAN & DIU NR NR NR NR NR NR NR NR NR NR
33 DELHI NR NR NR NR NR NR NR NR NR NR
34 LAKSHADWEEP NR NR NR NR NR NR NR NR NR NR
35 PUDUCHCHERRY NR NR NR NR NR NR NR NR NR NR
TOTAL 10.238 8.545 5.081 795.572 159481 440.819 16205 1183 4060.056 5216.233

Annexure referred to in Reply of Part (a) of LokSabha Starred Question No. 118 for answer on 03.03.2016-regarding "Erosion by Rivers". Annexure-3
STATE-WISE FLOOD DAMAGE DURING 2015
Sl. No. Name of State Area affected in Population affected in Damage to Crops Damage to Houses Cattle lost Human lives lost Damage to public utilities Total damages crops,house, & public utilities
Mha Million Area in mha Value in RsCrore Nos. Value in RsCrore Nos. Nos. in Rs.Crore in Rs.Crore
1 2 3 4 5 6 7 8 9 10 11 12
1 ANDHRA PRADESH 0.000 103 420 28
2 ARUNACHAL PRADESH
3 ASSAM 0.018 0.002 16
4 BIHAR 0.279 379 9 62.000 62.000
5 CHATTISGARH
6 GOA 0.000 0.000 0.000 0.000 0 0.000 0.000 0.000 0.000 0.000
7 GUJARAT 4.000 98
8 HARYANA
9 HIMACHAL PRADESH 0.006 6.865 121.380 3264 6.690 686 133 2.550 787.470
10 JAMMU & KASHMIR 3
11 JHARKHAND
12 KARNATAKA 0.174 776.480 10427 12.020 430 128 75.490 863.990
13 KERALA 0.017 0.006 6705 4 74 6.507 109.170
14 MADHYA PRAADESH
15 MAHARASHTRA 2
16 MANIPUR 0.103 12 5
17 MEGHALAYA 0.000 50 1
18 MIZORAM 4
19 NAGALAND
20 ODISHA 0.012 0.046 573 3
21 PUNJAB 0.032 0.071 151 14 11 420.340 624.877
22 RAJASTHAN 0.001 40
23 SIKKIM 6.000 303
24 TAMILNADU
25 TRIPURA
26 UTTAR PRADESH 0.010 6 0.530
27 UTTARAKHAND 411 181 33
28 WEST BENGAL 10.840 1.300 11433.680 830245 7895.630 22774 338 6023.960 25353.270
29 A & N ISLAND
30 CHANDIGARH
31 D & N HAVELI 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
32 DAMAN & DIU
33 DELHI
34 LAKSHADWEEP
35 PUDUCHCHERRY
TOTAL 0.006 22.176 7.599 12331.540 852346 7914.340 24812 906 6590.85 27801.31

Annexure-4
Annexure referred to in Reply of Part (b) of LokSabha Starred Question No. 118 for answer on 03.03.2016-regarding "Erosion by Rivers".
State-Wise Works Approved, Works Completed and Funds Released under Flood Management Programme (FMP) during XI and XII Plan

Rs. in crore
Sl. No. State XI Plan XII Plan Total (XI + XII Plan) Status
Works Approved Funds Released
(XI Plan) Works Approved Funds
Released
(XII Plan) Works Approved Number of Works
Completed
(upto12.3.2015) Total Funds Released
(XI + XII Plan)
Nos. Estimated Cost Nos. Estimated Cost Nos Estimated Cost

1	Arunachal Pradesh	21	224.69	81.69	0	0.00	46.83	21	224.69	11 128.52
2	Assam	100	996.14	748.86	41	1386.97	37.67	141	2383.11	94 786.52
3	Bihar	43	1370.42	723.18	4	447.63	184.64	47	1818.05	41 907.82
4	Chhattisgarh	3	31.13	15.57	0	0.00	3.75	3	31.13	19.32
5	Goa	2	22.73	9.98	0	0.00	2.00	2	22.73	2 11.98
6	Gujarat	2	19.79	2.00	0	0.00	0.00	2	19.79	1 2.00
7	Haryana	1	173.75	46.91	0	0.00	0.00	1	173.75	46.91
8	Himachal Pradesh	3	225.32	165.98	4	1139.62	171.87	7	1364.94	1 337.85
9	Jammu & Kashmir	28	408.22	252.57	14	163.18	82.81	42	571.40	8 335.38
10	Jharkhand	3	39.30	18.44	0	0.00	4.27	3	39.30	2 22.71
11	Karnataka	3	59.46	23.80	0	0.00	0.00	3	59.46	23.80
12	Kerala	4	279.74	63.68	0	0.00	55.22	4	279.74	118.90
13	Manipur	22	109.34	66.34	0	0.00	24.36	22	109.34	19 90.70
14	Meghalaya	0	0.00	3.81	0	0.00	0.00	0	0.00	0 3.81
15	Mizoram	2	9.13	14.48	0	0.00	1.46	2	9.13	15.94
16	Nagaland	11	49.35	28.96	3	37.38	31.04	14	86.73	9 60.00
17	Orissa	67	169.00	101.12	1	62.32	0.00	68	231.32	60 101.12
18	Puducherry	1	139.67	7.50	0	0.00	0.00	1	139.67	7.50
19	Punjab	5	153.40	40.43	0	0.00	0.00	5	153.40	40.43
20	Sikkim	28	104.92	83.69	17	261.40	8.15	45	366.32	21 91.84
21	Tamilnadu	5	635.54	59.82	0	0.00	0.00	5	635.54	59.82
22	Tripura	11	26.57	23.62	0	0.00	0.00	11	26.57	8 23.62
23	Uttar Pradesh	26	667.57	290.69	3	382.27	111.22	29	1049.84	6 401.91
24	Uttrankhand	12	119.82	49.63	9	183.45	132.65	21	303.27	8 182.28
25	West Bengal	17	1822.08	643.26	1	438.94	146.14	18	2261.02	6 789.40
Total		420	7857.08	3566.00	97	4503.16	1044.09	517	12360.24	293 4610.09

Annexure-5

Annexure referred to in Reply of Part (b) of LokSabha Starred Question No. 118 for answer on 03.03.2016-regarding "Erosion by Rivers".

State-wise Details of Works completed and Area Protected
Under Flood Management Programme During XI Plan

Sl. No	State	Total Schemes Completed (As on 31st March , 2012)	Area protected in lakh ha			Population benefited in Lakh
		Nos.	Old Area restored	New Area Protected	Total	
1	Arunachal. Pradesh	11	0	0.566	0.566	0.697
2	Assam	77	3.864	1.007	4.871	97.848
3	Bihar	26	10.237	0.285	10.522	70.92
4	Goa	1	0	0.002	0.002	0.15
5	J&K	8	0.9	0	0.9	0
6	Manipur	19	0	0.28	0.28	1.582
7	Nagaland	9	0	0.004	0.004	0.6
8	Orissa	60	1.474	0.082	1.556	7.202
9	Sikkim	21	0	0.201	0.201	2.397
10	Uttar Pradesh	6	0.442	0.096	0.538	4.005
11	Uttrankhand	3	0	0.001	0.001	0.053

12 West Bengal 7 0.087 0.063 0.15 11.81
13 Tripura 4 0 0.002 0.002 0.013
Total 252 17.004 2.589 19.593 197.277